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				Attomey	Docket Number	3382-61340-01	
				Applicati	on Number	10/017,694	
INFOR	MATIO	N DISCLOSURE STATE	EMENT	Filing Da	te	December 14, 2001	
	ĭ	BY APPLICANT		First Named Inventor		Chen	
				Art Unit	•	2654	
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	U.S. PATENT DOCUMENTS Copies of U.S. Patent documents do not need to be provided, unless requested by the Patent and Trademark Office. For patents, provide the patent						
number and the	issue date.	ments do not need to be provided, t For published U.S. applications, pa the application number and the fil	rovide the publi	by the Patent cation number	and Trademark Office. and the publication date	For patents, provide the patent a. For unpublished pending	
Examiner's Initials*	Cite No. (optional)	Number	Publicati	on Date	Name of Ap	oplicant or Patentee	
025		5,586,200	12.17.		Devaney et al.		
8 25		6,522,693	2.18.2		Lu et al.	•	
345		6,654,419 11.25.2003		Sriram et al.			
825	*	US-2002/0176624	5624 11.28.20		Kostrzewski et al.		
825		US-2003/0110236 6.12.2		2003	Yang et al.		
202		US-2005/0015528 1.20.2		2005	Du		
345		US-2005/0084166	4.21.2	2005	Boneh et al.		
Examiner's Initials*	Cito No. (optional)	OTHER DOCUMENTS					
825		Li et al., "Optimal Linear			for Server-Based	Computing," Proc. IEEE	
1. 7		Int'l Conf. on Communications, 5 pp. (2002). Ronda et al., "Rate Control and Bit Allocation for MPEG-4," IEEE Transactions on					
8-5		Circuits and Systems for Video Technology, pp. 1243-1258 (1999).					
725		Schaar-Mitrea et al., "Hybrid Compression of Video with Graphics in DTV Communication Systems," <i>IEEE Trans. on Consumer Electronics</i> , pp. 1007-1017 (2000).					
825	•	Vetro et al., "An Overview of MPEG-4 Object-Based Encoding Algorithms," <i>IEEE International Symposium on Information Technology</i> , pp. 366-369 (2001).					
		imerational Symposium	on Injurma		orogy, pp. 300-30	7 (ZUUI).	
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ATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number	10/017,694
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Art Unit	2631
Examiner Name	Donald Storm

U.S. PATENT DOCUMENTS

Copies of U.S. Patent documents do not need to be provided, unless requested by the Patent and Trademark Office. For patents, provide the patent number and the issue date. For published U.S. applications, provide the publication number and the publication date. For unpublished pending patent applications, provide the application number and the filing date.

Examiner's Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant or Patentee
215		4,051,470	9.27.1977	Esteban et al.
225		5,457,495	10.10.1995	Hartung .
825		5,467,134	11.14.1995	Laney et al.
الاست		5,579,430	11.26.1996	Grill et al.
125		5,742,735	4.21.1998	Eberlein et al.
825		5,819,215	10.6.1998	Dobson et al.
کامی		5,835,149	11.10.1998	Astle
825		6,029,126	2.22.2000	Malvar
کامل		6,111,914	8.29.2000	Bist
225		6,182,034	1.30.2001	Malvar
٦٤		6,370,502	4.9.2002	Wu et al.
Dr5		6,574,593	6.3.2003	Gao et al.
252		US-2002-0143556-A1	10.03.2002	Kadatch

SIGNATURE: CONSIDERED: 8/11/05

Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE STATEMENT
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Art Unit	2631
Examiner Name	Donald Storm

		Examiner Name Donald Storm
Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS
825		Advanced Television Systems Committee, "ATSC Standard: Digital Audio Compression (AC-3), Revision A," pp. 1-140 (August 2001).
DL5		Baron et al., "Coding the Audio Signal," Digital Image and Audio Communications, pp. 101-128, (1998).
DLS		Cheung et al., "A Comparison of Scalar Quantization Strategies for Noisy Data Channel Data Transmission," <i>IEEE Transactions on Communications</i> , Vol. 43, No. 2/3/4, pp. 738-742 (April 1995).
DL S		Crisafulli et al., "Adaptive Quantization: Solution via Nonadaptive Linear Control," <i>IEEE Transactions on Communications</i> , Vol. 41, pp. 741-748 (May 1993).
225		Dalgic et al., "Characterization of Quality and Traffic for Various Video Encoding Schemes and Various Encoder Control Schemes," Technical Report No. CSL-TR-96-701 (August 1996).
2005		Gibson et al., "Quantization," Digital Compression for Multimedia, Chapter 4, pp. 113-138 (1998).
کائی		Gibson et al., "Frequency Domain Speech and Audio Coding Standards," Digital Compression for Multimedia, Chapter 8, pp. 263-290 (1998).
১১১		Gibson et al., "MPEG Audio," Digital Compression for Multimedia, Chapter 11.4, pp. 398-402 (1998).
Des		Gibson et al., "More MPEG," Digital Compression for Multimedia, Chapter 11.6.2-11.6.4, pp. 415-416 (1998).
bes		ISO/IEC 13818-7, "Information Technology-Generic Coding of Moving Pictures and Associated Audio Information," Part 7: Advanced Audio Coding (AAC), pp. i-iv, 1-145 (1997).
24		ISO/IEC 13818-7, Technical Corrigendum 1, "Information Technology-Generic Coding of Moving Pictures and Associated Audio Information," Part 7: Advanced Audio Coding (AAC), Technical Corrigendum, pp. 1-22 (1997).
Dr.2		ISO, "MPEG-4 Video Verification Model version 18.0," ISO/IEC JTC1/SC29/WG11 N3908, Pisa, pp. 1-10, 299-311 (January 2001).
725		Jafarkhani, H., et al. "Entropy-Constrained Successively Refinable Scalar Quantization," <i>IEEE Data Compression Conference</i> , pp. 337-346 (1997).

EXAMINER SIGNATURE:	DATE CONSIDERED:	8/11/05
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^{*} Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Examiner Name	Donald Storm

		Examiner Name Donate Storm					
Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS					
dis		layant et al., "Digital Coding of Waveforms, Principles and Applications to Speech and Video," Prentice Hall, pp. 428-445 (1984).					
825		Naveen et al., "Subband Finite State Scalar Quantization," <i>IEEE Transactions on Image Processing</i> , Vol. 5, No. 1, pp. 150-155 (January 1996).					
Drz		Ortega et al., "Optimal Buffer-Constrained Source Quantization and Fast Approximation," <i>IEEE</i> , pp. 192-195 (1992)					
025		Ortega et al., "Adaptive Scalar Quantization Without Side Information," <i>IEEE Transactions on Image Processing</i> , Vol. 6, No. 5, pp. 665-676 (May 1997).					
mis		Ramchandran et al., "Bit Allocation for Dependent Quantization with Applications to MPEG Video Coders," <i>IEEE</i> , pp. v-381 - v-384 (1993)					
525		Ratnakar et al., "RD-OPT: An Efficient Algorithm for Optimization DCT Quantization Tables," 11 pp.					
D25		Sidiropoulos, "Optimal Adaptive Scalar Quantization and Image Compression," <i>ICIP</i> , pp. 574-578, (1998).					
D45		Sullivan, "Optimal Entropy Constrained Scalar Quantization for Exponential and Laplacian Random Variables," <i>ICASSP</i> , pp. V-265 - V-268 (1994).					
825		Trushkin, "On the Design on an Optimal Quantizer," <i>IEEE Transactions on Information Theory</i> , Vol. 39, No, 4, pp. 1180-1194 (July 1993).					
225	·	Westerink et al., "Two-pass MPEG-2 Variable-bit-rate Encoding," <i>IBM J. Res. Develop.</i> , Vol. 43, No. 4, pp. 471-488 (1999)					
کہم		Wong, "Progressively Adaptive Scalar Quantization," ICIP, pp. 357-360, (1996).					
DF2		Wu et al., "Entropy-Constrained Scalar Quantization and Minimum Entropy with Error Bound by Discrete Wavelet Transforms in Image Compression," <i>IEEE Transactions on Image Processing</i> , Vol. 48, No. 4, pp. 1133-1143 (April 2000).					
Drz		Wu et al., "Quantizer Monotonicities and Globally Optimally Scalar Quantizer Design," <i>IEEE Transactions on Information Theory</i> , Vol. 39, No. 3, pp. 1049-1053 (May 1993).					

EXAMINER SIGNATURE:	onald L. Storm	DATE CONSIDERED:	8/11/05

^{*} Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

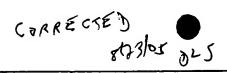
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. (7)	MAY 0 6 AUG	BY APPLICAN	T	Filed: December 14,	2001	Art Unit:	2631
	U.S. PATENT DOCUMENTS						
	lnit.*	Number	Date	Name	Class		PeFiled P
1	ಶಿಭ	5,686,964	11.11.97	Tabatabai et al.		Techo M	VEN
. /	25	5,845,243	12.01.98	Smart et al.		10/00	Co. 2002
	DUS	5,995,151	11.30.99	Naveen et al.			Cemer 2800
8/23/06/	272	6,115,689	09.05.00	Malvar			
			OTH	IER DOCUMENTS			
/	Gibson et al., <u>Digital Compression for Multimedia</u> , Title Page, Contents, "Chapter 7: Frequency Domain Coding," Morgan Kaufman Publishers, Inc., pp. iii, v-xi, and 227-262 (1998).						
/	14	H.S. Malvar, Signal Processing with Lapped Transforms, Artech House, Norwood, MA, pp. iv, vii-xi, 175-218, and 353-57 (1992).					
\checkmark	215	H.S. Malvar, "Lapped Transforms for Efficient Transform/Subband Coding," IEEE Transactions on Acoustics, Speech and Signal Processing, Volume 38, No. 6, pp. 969- 78 (1990).					
/	Seymour Schlien, "The Modulated Lapped Transform, Its Time-Varying Forms, and Its Application to Audio Coding Standards," <i>IEEE Transactions on Speech and Audio Processing</i> , Vol. 5, No. 4, pp. 359-66 (July 1997).						
J	de Queiroz et al., "Time-Varying Lapped Transforms and Wavelet Packets," IEEE Transactions on Signal Processing, Vol. 41, pp. 3293-3305 (1993).						
er J	Herley et al.; "Tilings of the Time-Frequency Plane: Construction of Arbitrary" Orthogonal Bases and Fast Tiling Algorithms," IEEE Transactions on Signal Processing, Vol. 41, No. 12, pp. 3341-59 (1993).						
	EXAMINE	ER: Donald 2 5	-	DATE 1/2	1/05		,
	*Examiner: Initial if considered, whether or not in conformance with MPEP 609; draw line through cite if not in conformance and not considered. Send copy.						

ISO/IEC 11172-3, Information Associated Audio for Digital Section Audio, 154 pp. (1993). Dolby Laboratories, "AAC Teaudio.com on World Wide Western Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, No. 4, pp. (Caetano et al., "Rate Control Section and Processing, Wol. 46, N	ty Audio Compression Using an Adaptive Wavelet ychoacoustic Modeling," <i>IEEE Transactions on Signal</i> p. 1085-93 (April 1998). Strategy for Embedded Wavelet Video Coders,"			
ISO/IEC 11172-3, Information Associated Audio for Digital Saudio, 154 pp. (1993). Dolby Laboratories, "AAC Teaudio.com on World Wide Western Packet Decomposition and Psacket	n Technology Coding of Moving Pictures and Storage Media at Up to About 1.5 Mbit/s Part 3 cechnology," 4 pp. [Downloaded from the web site aaceb on November 21, 2001.] ty Audio Compression Using an Adaptive Wavelet ychoacoustic Modeling," IEEE Transactions on Signal of 1085-93 (April 1998). Strategy for Embedded Wavelet Video Coders,"			
ISO/IEC 11172-3, Information Associated Audio for Digital Standing, 154 pp. (1993). Dolby Laboratories, "AAC To audio.com on World Wide World Wide World Packet Decomposition and Ps. Processing, Vol. 46, No. 4, pp. Caetano et al., "Rate Control Standing Packet Decomposition and Ps. Processing, Vol. 46, No. 4, pp. Caetano et al., "Rate Control Standing Packet Decomposition and Ps. Processing, Vol. 46, No. 4, pp. Caetano et al., "Rate Control Standing Packet Decomposition and Ps. Processing, Vol. 46, No. 4, pp. Caetano et al., "Rate Control Standing Packet Decomposition and Ps. Processing, Vol. 46, No. 4, pp. Caetano et al., "Rate Control Standing Packet Decomposition and Ps. Processing, Vol. 46, No. 4, pp. Caetano et al., "Rate Control Standing Packet Decomposition and Ps. Processing, Vol. 46, No. 4, pp. Caetano et al., "Rate Control Standing Packet Decomposition and Ps. Processing, Vol. 46, No. 4, pp. Caetano et al., "Rate Control Standing Packet Decomposition and Ps. Processing, Vol. 46, No. 4, pp. Caetano et al., "Rate Control Standing Packet Decomposition and Ps. Processing, Vol. 46, No. 4, pp. Caetano et al., "Rate Control Standing Packet Decomposition and Ps. Processing, Vol. 46, No. 4, pp. Caetano et al., "Rate Control Standing Packet Decomposition and Ps. Processing, Vol. 46, No. 4, pp. Caetano et al., "Rate Control Standing Packet Decomposition and Ps. Processing, Vol. 46, No. 4, pp. Caetano et al., "Rate Control Standing Packet Decomposition and Ps. Processing Packet Decomposition and Ps. Pro	Storage Media at Up to About 1.5 Mbit/s Part 3 cechnology," 4 pp. [Downloaded from the web site aaceb on November 21, 2001.] ty Audio Compression Using an Adaptive Wavelet ychoacoustic Modeling," <i>IEEE Transactions on Signal</i> pp. 1085-93 (April 1998). Strategy for Embedded Wavelet Video Coders,"			
Srinivasan et al., "High-Quali Packet Decomposition and Ps Processing, Vol. 46, No. 4, pp	ty Audio Compression Using an Adaptive Wavelet ychoacoustic Modeling," <i>IEEE Transactions on Signal</i> p. 1085-93 (April 1998). Strategy for Embedded Wavelet Video Coders,"			
Packet Decomposition and Ps Processing, Vol. 46, No. 4, pp Caetano et al., "Rate Control of	ychoacoustic Modeling," <i>IEEE Transactions on Signal</i> p. 1085-93 (April 1998). Strategy for Embedded Wavelet Video Coders,"			
	"Rate Control Strategy for Embedded Wavelet Video Coders," ters, pp. 1815-17 (October 14, 1999).			
	rol in DCT Video Coding for Low-Delay ctions on Circuits and Systems for Video Technology, ary 1999).			
	richtenempfänger, Title Page, Table of Contents, "I: rzel-Verlag, Stuttgart, pp. III, IX-XI, 1-26; and 231-32			
Terhardt, "Calculating Virtual	itch," Hearing Research, 1:155-182 (1979).			
Lufti, "Additivity of Simultan 73:262-267 (1983).	neous Masking," Journal of Acoustic Society of America,			
	king as a Function of Frequency, Masker Level, and pustical Society of America, 71:950-962 (1982).			
EXAMINER: Donald L. Ston	DATE: 1/21/05			

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Docket: 3389-61340 App: 10/017,694 WASSELL TEMPORARY MATION DISCLOSURE STATEMENT Applicant: Chen et al. BY APPLICANT MAY O 6 700 Art Unit: 2631 Filed: December 14, 2001 OTHER DOCUMENTS ITU, Recommendation ITU-R BS 1387, Method for Objective Measurements of Perceived Audio Quality, 89 pp. (1998). M ITU, Recommendation ITU-R BS 1115, Low Bit-Rate Audio Coding, 9 pp. (1994) .72°. Beerends, "Audio Quality Determination Based on Perceptual Measurement Techniques," Applications of Digital Signal Processing to Audio and Acoustics, Drd Chapter 1, Ed. Mark Kahrs, Karlheinz Brandenburg, Kluwer Acad. Publ., pp. 1-38 (1998).Zwicker, Psychoakustik, Title Page, Table of Contents, "Teil I: Einfuhrung," Index, Springer-Verlag, Berlin Heidelberg, New York, pp. II, IX-XI, 1-30, and 157-162 Pr (1982).Solari, Digital Video and Audio Compression, Title Page, Contents, "Chapter 8: Sound and Audio," McGraw-Hill, Inc., pp. iii, v-vi, and 187-211 (1997). A.M. Kondoz, Digital Speech: Coding for Low Bit Rate Communications Systems, "Chapter 3.3: Linear Predictive Modeling of Speech Signals" and "Chapter 4: LPC Parameter Quantisation Using LSFs," John Wiley & Sons, pp. 42-53 and 79-97 Kadatch, U.S. Patent Application Serial No. 09/771,371, entitled, "Quantization Loop with Heuristic Approach," filed January 26, 2001. Chen et al., U.S. Patent Application Serial No. 10/017,702, entitled, "Quantization Matrices for Digital Audio," filed December 14, 2001. Chen et al., U.S. Patent Application Serial No. 10/017,861, entitled, "Techniques for りつ Measurement of Perceptual Audio Quality," filed December 14, 2001. 1/21/05 EXAMINER: Daniel Jan DATE: *Examiner: Initial if considered, whether or not in conformance with MPEP 609; draw line through cite if not in conformance and not considered. Send copy.



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	PROPRIENTION DISCLOSURE STATEMENT		Applicant: Chen et al.				
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	TA PAOEMARK	OTHER DO	DOCUMENTS BE A				
/	2-2	Chen et al., U.S. Patent Application Serial No. 10/020,708, entitled, "Adaptive 2 5					
	. 7.5	Chen et al., U.S. Patent Application Serial No. 10/016,918, entitled, "Quality Improvement Techniques in an Audio Encoder," filed December 14, 2001.					
	July	Wragg et al., "An Optimised Software Solution for an ARM Powered™ MP3 Decoder," 9 pp. [Downloaded from the World Wide Web on October 27, 2001.]					
✓	Ju.5 -	Fraunhofer-Gesellschaft, "MPEG Wide Web on October 24, 2001.		loaded from the World			
/	9A	Fraunhofer-Gesellschaft, "MPEG Web on October 24, 2001.]	G-2 AAC," 3 pp. [Downloaded	from the World Wide			
	0 V	OPTICOM GmbH, "Objective Perceptual Measurement," 14 pp. [Downloaded from the World Wide Web on October 24, 2001.]					
<i>f</i> .	<i>by</i> –	De Luca, "AN1090 Application Note: STA013 MPEG 2.5 Layer III Source Decoder," STMicroelectronics, 17 pp. (1999).					
	07	Phamdo, "Speech Compression," 13 pp. [Downloaded from the World Wide Web on November 25, 2001.]					
radi and at the V	94	*Malvar, "Biorthogonal and Non- with Reduced Blocking and Rin Signal Processing, Special Issue Applications, vol. 46, 29 pp. (19	ging Artifacts," appeared in IEE on Multirate Systems, Filter Bo	EE Transactions on	الله الله المنطقة المن		
	EXAMINER: Darles 1/2/05						
	*Examiner: Initial if considered, whether or not in conformance with MPEP 609; draw line through cite if not in conformance and not considered. Send copy.						